

S outh Coast Bioregion

The South Coast Bioregion is uniquely California — an area of starkly contrasting landscapes ranging from rugged coastal mountains, world-famous beaches, rustic canyons, rolling hills, and densely populated cities. The bioregion extends from the southern half of Ventura County to the Mexican Border and east to the edge of the Mojave desert. Two of California's largest metropolitan areas — Los Angeles and San Diego — are in this bioregion.

Location, Cities, People

Bounded on the north by, the southern end of the Los Padres National Forest, the bioregion extends some 200 miles south to Mexico, east to the Mojave Desert and west to the Pacific Ocean. The bioregion encompasses all or part of six counties: the coastal half of Ventura County, all of Orange County, most of Los Angeles County, the southwestern edge of San Bernardino County, the western end of Riverside County, and the western two-thirds of San Diego County. Major cities include Los Angeles, San Diego, Long Beach, Santa Ana, Anaheim, Riverside, and San Bernardino. The South Coast, home to two of the state's largest cities, is the most populous bioregion with more than 13.8 million people, according to 1990 census figures.

Metropolitan Los Angeles, a major transportation hub, is criss-crossed by a legendary network of freeways that have names as well as numbers. For example, Interstate 5, California's main north-south highway, is known in different segments as the Golden State Freeway, the Santa Ana Freeway, and the San Diego Freeway.

As in much of California, the people of the South Coast Bioregion reflect the state's cultural history. The Native American population includes many bands of Mission Indians, and the Spanish and Mexican heritage is evident in architecture, geographic names, and a large Spanish-speaking population. Rapid growth, employment opportunity, and a mild, mostly dry climate has attracted immigrants from all over the world,

particularly in metropolitan Los Angeles, a cultural melting pot.

Tourist Attractions, Industries

Many of the nation's top tourist attractions are found in the South Coast Bioregion, the home of Disneyland, Hollywood, Sea World, and the San Diego Zoo, miles of palm-fringed beaches and spectacular coastal mountain ranges for hiking and camping.

Major industries include oil, agriculture, fishing, shipping, movies and television, banking and finance, computers, and aerospace, which has declined with the ending of the Cold War. Military installations include Camp Pendleton Marine Corps Base, El Toro Marine Corps Air Station, March Air Force Base, Miramar Naval Air Station, North Island Naval Air Station, and Point Mugu Naval Pacific Missile Test Center.

Climate, Geography

The year-around mild climate and varied geographical features of the South Coast contribute to its great popularity. Hot dry summers with predictable wildfires are followed by wet winters with storms that can trigger mudslides on fire-denuded slopes. Smog remains a serious problem in the South Coast bioregion, particularly the Los Angeles basin, but air quality regulations have helped to control it.

The South Coast Bioregion is a study in contrasts — ocean and desert, flatlands and mountains, including 11,500-foot San Geronio Peak in Riverside County. Major rivers and their watersheds are the Santa Clara, Los Angeles, Santa Ana, San Gabriel, San Luis Rey, San Jacinto, Santa Margarita, and San Diego. Publicly owned or managed lands include four national forests: the Angeles, Los Padres, Cleveland, and San Bernardino; numerous parks, state beaches, historic parks; and federal wilderness, recreation and wildlife areas, including Malibu Creek and Point Mugu State Parks, Bolsa Chica Ecological Reserve, Torrey Pines State Reserve, and Sweetwater and Tijuana National Wildlife Refuges.

In San Diego, Orange and Riverside counties, the state's Natural Community Conservation Planning (NCCP) pilot program involving local, state, and federal partners is helping to protect the coastal sage scrub habitat of the threatened California gnatcatcher. In the Santa Monica Mountains, the National Park Service, Santa Monica Mountains Conservancy, and California Department of Parks and Recreation are helping to preserve spectacular habitat. In Ventura County, endangered California condors are protected at the Sespe Condor Sanctuary.

Plants, Wildlife

Tremendous urbanization in the South Coast Bioregion has brought about the most intense effects on natural resources of any bioregion, resulting in alteration and destruction of habitat and proliferation of exotic or non-native species. In fact, the popular palm tree is not native to the Golden State. Habitat varies widely, from chaparral, juniper-pinyon woodland, and grasslands at lower elevations to mixed hardwood forest, southern oak, southern Jeffrey pine and southern yellow pine at higher levels. Along the coast, where real estate is especially prized, salt marshes and lagoons no longer are common habitat. But efforts are underway from Ventura County to the Mexican border to preserve and restore coastal wetlands.

The bioregion is home to mountain lions, coyotes, badgers, grey foxes, kit foxes, black bears, raccoons, mule deer, hawks, herons, golden eagles, ospreys, peregrine falcons, desert iguanas, dolphins, whales, endangered brown pelicans, and California sea lions. Rare animals include the Stephen's kangaroo rat, monarch butterfly, San Diego horned lizard, Peninsula desert bighorn sheep, orange-throated whiptail, California least tern, Belding's savannah sparrow, least Bell's vireo, Santa Ana sucker, arroyo southwestern toad and Tehachapi pocket mouse.

Rare plants include San Diego barrel cactus, Conejo buckwheat, Plummer's mariposa lily, mountain springs bush lupine, Otay tarplant, Laguna Mountains jewelflower, San Jacinto prickly phlox, and Mt. Gleason Indian paintbrush. For a complete list of the South Coast Bioregion's federal and state endangered, threatened and rare species, please refer to the chart at the end of this bioregional section.

CURRENT CONSERVATION INITIATIVES

*In the City of Carlsbad, the **Batiquitos Lagoon**, one of the most significant and successful wetlands restoration projects in the United States, was recently completed by the Port of Los Angeles and the City of Carlsbad for \$55 million through a cooperative interagency agreement which included the U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game, and California State Lands Commission.*

The Batiquitos Lagoon, a 600-acre coastal wetland in northern San Diego County, is beckoning wildlife once again, after years of languishing under sedimentation from nearby development that blocked the natural flow of ocean tides. Birds that historically inhabited the lagoon are returning to find a newly restored brackish marsh with just the right mix of sand and vegetation for nesting. Endangered California least tern and threatened snowy plover, which frequented Batiquitos Lagoon before it was nearly ruined, are flocking back, enticed by five specially created protected nesting areas of sandy nonvegetated areas near the water. Restoration experts hope that replanting and expanding of the marsh plant pickleweed will encourage the endangered Belding's savannah sparrow, and that planting of cordgrass will attract the endangered light-footed clapper rail. Numerous non-listed bird species are expected as well.

Aquatic species already are benefiting from the lagoon restoration. California halibut, croaker, barred sand bass, spotted bass, and several species of surf perch have taken up residence at Batiquitos, as well as many invertebrates such as clams. An experimental transplanting of eel grass was completed and 20 species were found where there had been practically none. Three months later, there were 32 species. The Batiquitos project is sponsored jointly by the City of Carlsbad, Port of Los Angeles, U.S. Fish and Wildlife Service, California Department of Fish and Game, California State Lands Commission, and National Marine Fisheries Service. The cooperative effort represents a milestone in wetlands restoration that already bears evidence of success.

For more information contact: Ralph Appy,

Assistant Director of Environmental Management, Port of Los Angeles at (619) 732-3497 or the Batiquitos Lagoon Foundation at (760) 943-7583.

*The **Coal Canyon Biological Corridor** is needed to allow inter-range travel by birds and mammals between Puente-Chino Hills and Santa Ana Mountains. In addition to its functions as a biological linkage, the corridor would make possible a trail connecting these two important natural areas. Restoring a natural linkage in what is now a roaded underpass would set a global precedent.*

The Santa Ana Mountains and the Puente-Chino hills together encompass about 511,000 acres of wildlands containing biological resources of statewide and worldwide significance. The habitat linkage between these two areas, once several miles wide, has become narrow and tenuous due to roads and associated urban development. The Coal Canyon linkage is believed to be one of the two most significant threatened biological corridors in Orange and San Diego counties.

The Wildlife Corridor Conservation Authority (WCAA) is a joint power authority created expressly to maintain connectivity among the protected parcels in the Whittier-Puente-Chino Hills and northern Santa Ana Mountains. Its members include local governments, a public representative, the Santa Monica Mountains Conservancy, the California Department of Fish and Game, and the California Department of Parks and Recreation. In cooperation with WCCA, local government entities have recently completed several key land purchases, which contribute to this effort. A number of public funding sources are being used for these acquisitions including money from the City of Whittier, Los Angeles County Department of Parks and Recreation, Puente Hills Landfill Native Habitat Preservation Authority, Mountain Recreation and Conservation Authority, California Department of Transportation, and California Department of Parks and Recreation. The Wildlife Conservation Board is also an acquisition partner, as well as the Trust for Public Lands.

For more information contact: Rick Rayburn, California Department of Parks and Recreation

at (916) 653-8380.

*The **Natural Communities Conservation Planning (NCCP) Program** was initiated in 1991 by Governor Pete Wilson, and is administered by the California Department of Fish and Game. This ground-breaking partnership effort has set aside thousands of acres of wildlife habitat and open space in booming Southern California.*

The State of California's NCCP pilot program is an unprecedented cooperative effort to protect habitats and species. The program, which began in 1991 under the State's Natural Community Conservation Planning Act, is broader in its orientation and objectives than the California and federal Endangered Species Acts. These laws are designed to identify and protect individual species that have already declined in number significantly. The primary objective of the NCCP program is to conserve natural communities and accommodate compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key stakeholders in the process.

The focus of the pilot program is the coastal sage scrub habitat of Southern California, home to the California gnatcatcher and approximately 100 other potentially threatened or endangered species. This much-fragmented habitat is scattered over more than 6,000 square miles and encompasses large parts of three counties - Orange, San Diego, and Riverside - and smaller portions of two others - Los Angeles and San Bernardino. Fifty-nine local government jurisdictions, scores of landowners from across these counties, federal wildlife authorities, and the environmental community are actively participating in the program.

The southern coastal sage scrub NCCP region is organized into 11 planning "subregions". For planning purposes, some of the subregions are organized into "subareas" that correspond to the geographic boundaries of participating jurisdictions or landowners. In each subregion and subarea, a local lead agency coordinates the collaborative planning process. Working with landowners, environmental organizations, and

other interested parties, the local agency oversees the numerous activities that compose the development of a conservation plan. The California Department of Fish and Game and the U.S. Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP participants in these functions.

Several subregional plans have already been developed. The Multiple Species Conservation Program (MSCP) plan approved by both the City and County of San Diego creates a 172,000 acre urban/rural preserve that will provide for the conservation of 85 sensitive species and will benefit hundreds of more common species. In Orange County, the Central-Coastal NCCP subregion, comprising approximately 208,000 acres and involving thirteen cities and five major landowners, was the program's first fully approved NCCP. This subregional NCCP establishes a 39,000 acre reserve and provides for the conservation of 39 sensitive species.

The NCCP program has become the national model for bringing disparate interests together to resolve conflicts between land uses and conservation of biological resources on an ecosystem basis.

For more information contact: Gail Presley, California Department of Fish and Game, NCCP Program Manager at (916) 653-9834.

The Santa Monica Mountains Conservancy is using innovative partnerships to assist in efforts to acquire lands in the Santa Monica Mountains — some of the last remaining open space areas in the Los Angeles region.

The goal of the Santa Monica Mountains Conservancy is to create contiguous habitat and wildlife corridors in the Santa Monica Mountains in Los Angeles County. The Conservancy, a state agency, has been working toward this goal since its creation in 1979. Since that time, the Conservancy has managed to successfully acquire 21,000 acres of natural open space lands in the 450,000 acre zone that it has defined as critical lands. Though many acres have already been protected, the Conservancy has identified another 15,000 as crucial for preservation.

The challenge of the Conservancy's mission,

however, is growing. Severe fiscal constraints at all levels of government has meant that there is not enough money from public sources to purchase the lands that the Conservancy proposes to protect. Instead, the Conservancy must rely on innovative strategies that entail mutual benefits to private landowners, developers, and local governments. The Conservancy uses its real estate and biological expertise, for example, to show landowners and developers how designing a development project with less density and more open space will increase property value, fit into a larger natural open space picture, and perhaps provide a link to a wildlife corridor or recreation trail. Using such strategies, the Conservancy secured an unprecedented agreement with entertainer Bob Hope and the Ahmanson Land Company that will result in more than 10,000 acres of public parkland in Ventura and Los Angeles counties. The deal provided permanent protection to Hope's Jordan Ranch in the Simi Hills. Superstar Barbra Streisand donated her 23-acre \$15 million estate in wooded Ramirez Canyon near Malibu. At her request, the four theme houses, caretaker's cottage, garden, orchard, and tennis court have become the Streisand Center for Conservancy Studies and are being used for research, seminars and retreats.

To expand its acquisition capabilities, the Conservancy has formed a number of joint powers agencies (JPAs) with local governments, so that the partners can exercise their separate authorities jointly. It also has created partnerships with private landowners in order to work creatively with local governments. Once the Conservancy acquires land, the lands are protected for public use as parks, beaches, trails, canyons, or open spaces. Management of the lands is the shared responsibility of the Conservancy, California Department of Parks and Recreation, National Park Service (NPS), and local park agencies. The area is one of three areas in the state where the California Department of Parks and Recreation and NPS formally work together. Through these partnerships, the Conservancy is able to acquire and protect significant open spaces and parkland for the benefit of millions of people.

For more information contact: Joe Edmiston, Executive Director, Santa Monica Mountains Conservancy at (310) 589-3200.

The Southern California Wetlands Clearinghouse is working to identify wetland acquisition and restoration priorities, prepare plans for priority sites, pool funds, and oversee project maintenance and monitoring in order to accelerate coastal wetland restoration in the region before it is too late.

Southern California's coastal wetlands are of vital ecological, hydrological, and economic significance to the region. Unfortunately, it is estimated that somewhere between seventy and seventy five percent of the coastal wetlands in the region have been lost. Over the last twenty five years, efforts to acquire, restore, and enhance these wetlands have focused on individual wetlands but have failed to address a comprehensive, region-wide focus and the important interrelationships among all Southern California wetlands. As a result, past restoration efforts have been uncoordinated and of minimal success.

The Southern California Wetlands Clearinghouse seeks to provide this vision by establishing a process for bringing entities together to develop a coordinated, systematic, and regional approach to conserving these important wetland resources. The clearinghouse, a partnership of public agencies working cooperatively to acquire, restore, and enhance coastal wetlands and watersheds between Point Conception and the California border with Mexico, uses a non-regulatory approach and an ecosystem perspective.

The clearinghouse is guided by information contained in the Southern California Wetlands Inventory, a study that identifies historic and current conditions of forty-one coastal wetlands. Fourteen public agencies, all of which have responsibilities for coastal wetlands and watersheds in Southern California, participate in the clearinghouse. The organizations include the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Resources Agency, California Environmental Protection Agency, California Coastal Commission, California Department of Fish and Game, California State Coastal Conservancy, California State Lands Commission, State Water Resources Control Board, and Regional Water Quality Control Boards of San Diego, Santa Ana, Los Angeles,

Central Coast.

Clearinghouse members work together to identify wetland acquisition and restoration priorities, prepare plans for priority sites, pool funds to undertake these projects, implement priority plans, and oversee post-project maintenance and monitoring. The goal of the clearinghouse is to accelerate the pace, the extent, and the effectiveness of coastal wetland restoration in Southern California through the development and implementation of a regional prioritization plan. At its first meeting, the board identified eleven wetlands areas across Southern California that were in need of recovery work in the upcoming year. These projects include wetlands in each of the five southern California counties, and tentatively include Tijuana, San Elijo, Huntington Beach, Upper Newport Bay, Bolsa Chica, Malibu Lagoon, Ormond Beach, Ventura River and Goleta Slough.

The clearinghouse has also begun a public outreach effort to involve environmental groups, businesses, and local governments in this effort. It is expected to begin holding scientific workshops and meetings with the resource agency managers and the public to develop a 20-year vision on how and when to restore the remaining wetlands in southern California.

Initial funding for the clearinghouse came from the State of California through an interagency grant from the California Department of Fish and Game to the California State Coastal Conservancy. Several participating agencies contributed funds and services for development of the Southern California Coastal Wetlands Inventory. Currently, the clearinghouse is supported by state funding through the California State Coastal Conservancy and additional grant monies from the federal and state government. The Clearinghouse has also begun an inventory of important associated coastal watersheds.

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